

Abstract of the Disclosure

A capacitive fluid level sensor is disclosed that operates without the use of a float, wherein coplanar sensing electrodes disposed onto a dielectric substrate and positioned proximate a dielectric wall of a vessel containing a fluid, form a fringing field capacitance that changes in accordance with changes in the level of the fluid. The electrodes are electrically insulated from the measured fluid. The electrodes are sized and spaced to maximize response of the capacitance to changes in the level of the fluid, while minimizing the effects of the dielectric wall. The sensor is fabricated such that it can be positioned against the outside of a dielectric wall of a vessel, or embedded within a dielectric material. A low permittivity spacer and shield assembly are taught which reduce sensitivity to electric fields external to the vessel. An interdigital comb configuration of the electrodes is also disclosed in which gaps or depressions are formed into the dielectric substrate in an area of spacing of the electrodes.